

Nugget Exploration Company

P. O. BOX 287

CASPER, WYOMING

PHONE 23 4-9151

December 16, 1963

Supervisor, Oil & Gas Commission
Newhouse Building
Salt Lake City, Utah

Attention: Mr. Jack Feight

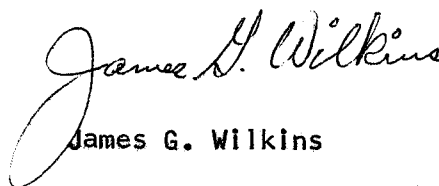
Dear Sir:

Attached please find in duplicate Notice of Intention to Drill with survey plats for McCulloch Oil Corporation of California No. 1 Gov't. Wolf, located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, Township 40 South, Range 13 West, Washington County, Utah. In accordance with the state regulations of the Utah Oil and Gas Conservation Commission and in accordance with Rule C-3-C, it is hereby requested that a tolerance be permitted for the above described well. The tolerance is hereby requested on the basis of topographic problems in this immediate area. In order to properly locate the well as to the geologic structural feature as mapped the only location that will be located on the known feature is as shown on the plats (3515 feet from the West line 90 feet from the South line Section 23-T40S-R13W). This location falls in a canyon with the Hurricane Cliffs immediately to the east and canyon walls plus a fault escarpment immediately to the west.

It is hereby respectfully requested that you approve this Intention to Drill. If you have any questions concerning this request please do not hesitate to call me at 234-9151, Casper, Wyoming.

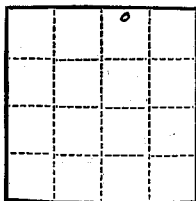
Very truly yours,

NUGGET EXPLORATION COMPANY


James G. Wilkins

JGW:bh

Attachments



Copy H.R.C.

2

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake
Lease No. U 023 474-A
Unit Wildcat

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

4105
December 16, 1963
1 Gov't. Well
Well No. _____ is located 90 ft. from N line and 3515 ft. from W line of sec. 23
NW NW NE, Sec. 23.
(1/4 Sec. and Sec. No.)
Wildcat
(Field)
T40S
(Twp.)
R13W
(Range)
6th P.M.
(Meridian)
Washington
(County or Subdivision)
Utah
(State or Territory)

The elevation of the derrick floor above sea level is 3810 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudlogging jobs, cementing points, and all other important proposed work)

It is proposed to drill the above-described well to a depth sufficient to penetrate and adequately test the upper Cambrian formation at an anticipated total depth of 5000'. A string of 10-3/4" 8 Ad. 40# J-55 surface casing will be set at $\pm 150'$ and cemented with approximately 150 sacks (cement to surface). It is proposed to drill a 7-7/8" hole to total depth with air as a circulating medium. In the event the well is mudded up a low solids mud will be used. All prospective oil and gas horizons will be tested. In the event of commercial production a string of casing 5-1/2" J-55 14# will be set through the productive interval and cemented with ± 125 sacks.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company McCulloch Oil Corporation of California
Address 5965 West 98th Street
Los Angeles 45, California
By James S. Watkins
Title Consultant

T. 40 S. R. 13 W. S.L.B.M.

OLD ROCK
CORNER

80.06 CHS. — U.S.

SO. 90 FT.

EAST 3515 FEET

DRILLING
SITE

N₂ OF SEC. 23

23

MC CULLOCH GOVERNMENT
WOLF N₂ 1

RALPH B. PLATT

REGISTERED ENGINEER AND LAND SURVEYOR

MC CULLOCH OIL CORP.
OF CALIFORNIA

DATE: DEC. 13/63

SCALE: 1 IN. TO 600 FT.

WASHINGTON CO. — UTAH

OIL & GAS CONSERVATION COMMISSION
OF THE STATE OF UTAH

DESIGNATION OF AGENT

The undersigned producer, operator, transporter, refiner, gasoline or initial purchaser who is conducting oil and/or gas operations in the State of Utah, does, pursuant to the Rules and Regulations, and Rules of Practice and Procedure of the Oil and Gas Conservation Commission of the State of Utah, hereby appoint, A. W. Watson & Ned Warnock, whose address is 175 S. Main St., Salt Lake City 11, Utah, (~~his~~, ~~their~~ its) designated agent to accept and to be served with notices from said Commission, or from other persons authorized under the Oil and Gas Conservation Act of the State of Utah.

The undersigned further agrees to immediately report in writing, all changes of address of the agent, and any termination of the agent's authority, and in the latter case, the designation of a new agent or agents shall be immediately made. This designation of agent, however, shall remain in full force and effect until and unless a new designation agent is filed in accordance with said statute and said regulations.

Effective Date of Designation December 13, 1963

Company McCULLOCH OIL CORPORATION OF CALIFORNIA Address 5965 W. 98th Street, Los Angeles, Calif.

By *P. J. Fazio* Title Vice Pres., Mgr. Explor. & Oper.
(Signature)

cc: C. T. Corporation
510 S. Spring Street
Los Angeles 13, California

NOTE: Agent must be a resident of Utah.

cc: Lloyd Corp., Ltd.
9441 Olympic Blvd.
Beverly Hills, Calif.

Nugget Exploration Company

P. O. BOX 287

CASPER, WYOMING

PHONE 23 4-9151

December 17, 1963

VIA AIR MAIL

Supervisor, Oil & Gas Commission
Newhouse Building
Salt Lake City, Utah

Attention: Mr. Jack Feight

Dear Sir:

In reference to our letter dated December 16, 1963 with regard to the Notice of Intention to Drill McCulloch Oil Corporation of California #1 Gov't. Wolf, NW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 23-T40S-R13W, Washington County, Utah, it was not brought to your attention in that letter that McCulloch Oil Corporation of California does have control either by Assignment or Farmout Agreement of all leases 660 feet from the well site.

Please attach this letter to the Intention to Drill, for your file.

Very truly yours,

NUGGET EXPLORATION COMPANY

James G. Wilkins
James G. Wilkins

JGW:bh

December 18, 1963

McCulloch Oil Corporation of California
5965 West 98th Street
Los Angeles 45, California

Re: Notice of Intention to Drill Well
No. GOVERNMENT WOLF #1, 90' FNL &
3515' FWL, NW NW NE of Section 23,
Township 40 South, Range 13 West,
Washington County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill Well No. Government Wolf #1 on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, Utah State Oil and Gas Conservation Commission. However, this approval is conditional upon a Designation of Agent being filed with this Commission in accordance with Rule A-4 of said rules and regulations.

As soon as you have determined that it will be necessary to plug and abandon the above mentioned well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer
Office: DA 8-5771 or DA 8-5772
Home: CR 7-2890
Salt Lake City, Utah

This approval terminates within 90 days if this well has not been spudded within said period.

Enclosed please find Form OGCC-8-X, which is to be completed

December 18, 1963

if water sands (aquifers) are encountered while drilling particularly accessible near surface water sands. Your cooperation with respect to completing this form will be greatly appreciated.

Incidentally, in your letter of December 16, 1963, you indicate that this well is located 90 feet from the south line rather than from the north line as indicated on your notice of intention to drill and location plat. If this well is listed incorrectly on the location plat and notice, please advise.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

Q
CLAREN S. FERRY
EXECUTIVE DIRECTOR

GW:cmf

cc: Don Russell, District Engineer
U. S. Geological Survey
Salt Lake City, Utah

H. L. Gentry, Petroleum Engineer
Oil & Gas Conservation Commission
Nash, Utah

*Nugget Exploration Co
Casper
attn: James Withers*

DEVIATION SURVEY RECORD

<u>Feet</u>	<u>Degrees</u>
85	0
250	3/4
465	1/4
630	1/2
940	2
985	2
1,080	2
1,255	2
1,420	2
1,530	1-1/2
1,650	1-1/4
1,770	1-1/4
1,930	3/4
2,205	1
2,430	1
2,740	1
2,930	1
3,330	1-1/4
3,530	1-1/4
3,900	1
4,075	1-1/2
4,455	1-1/2
4,840	1-3/4
6,237	5
6,360	5
6,540	5-1/2
6,700	5
6,900	5

WELL SUMMARY

Operator: McCulloch Oil Corporation of California

Lease: Govt.-Wolf #1

Location: Sec. 23, T40N, R13W, 90' south & 3,515' east of northwest corner

County: Washington

State: Utah

Field: Wildcat

Contractor: Willard Pease Drilling Co.
Rig #2 - C. H. Baker, Pusher

Elevation: 3,800' ground (topo)
3,810' kelly bushing

Commenced: December 30, 1963

Surface Pipe: 11 joints, 10-3/4", new, J-55, 32.75#. Set at 373.50' (KB).
Cemented to surface with 165 sacks, Type 5 Portland cement,
2% CaCl₂.

Intermediate Pipe: 92 joints, 7-5/8", new, J-55, 26.40#. Set at 2,994' (KB).
Cemented with 75 sacks, Type 5 Portland cement.

Completed: Plugged and abandoned February 29, 1964

Cores:

Core #1	3,082'/3,090'
Core #2	7,058'/7,090'
Core #3	7,256'/7,315'

Mud Logger: Portable Engineering Corp.

Samples Worked By: American Stratigraphic Company
1820 Broadway, Denver, Colorado

Logs:

Induction-Electrical Survey	980'-5,017'
Sonic-Caliper	2,994'-5,017'
Sonic-Gamma Ray	4,810'-7,062'
Gamma Ray-Neutron	0'-5,017'

2/24/64 - Kernal, Utah

McCullough Oil (Mike Maxwell)

Washington Co.

Gov. Woolf #1

Whitewater Hotel
L. H. Henry 6733541

sec. 23 T 40 S R 13 W

T.D. 7058 (approx top only is)

no dry hole
made at
present

Mud Logger: top of Cambrian ~ 5000 ft.

No one agrees at present
what formation top ore is

(1) went only to stoppage

7 7/8 at 2994 (leave in hole)

not on forecast
in dolomite
with quartz
in center of
this room.

only cements 300 ft up from shoe (7500)

Willard Pearce - oral approval from Schulfield

(1) put (15) sb (50 ft) at surface

(2) 40 sb at shoe 7 7/8" = 100 ft

from 2944 to 3044 (1/2 mi E to east)

(*) Water show (300 - 500 gal per hour)

stood at 765) → being 7 7/8"

water sand might not be covered by

cement - but no salt water in well

(1) Contamination problem

200 - 300 ft from T.D. lost circulation

70 lb mud kept in hole - hole tight

at 6270 to 6280 - lost circulation

material take care of this. X over →

2/9/65 - Mr. called to
 "Permanently" abandoned well -
 (Don found not ~~for~~ available)
 so I instructed operator to:

- (1) Since no geologic top place
 cement plugs so that all
 porous zones are isolated - fresh
 water zones from salt water zones
 as indicated from logs.
- (2) Pull $7\frac{5}{8}$ " surface casing ~~then~~
 at free point and place
 cement plug across stab. (or perforate and squeeze)
- (3) Place another cement plug across
 top of fresh water zone.
- (4) 10 sh at surface with marker.

2/26/65 Mr. Mike Mosby of Embolus Inc. (Dallas)
 in my note and request the following program:

- (1) 4000 ft of 5000 ft \rightarrow only water encased below $7\frac{5}{8}$ " casing
- (2) 4000 ft of 7 $\frac{5}{8}$ " $\frac{1}{2}$ in $\frac{1}{2}$ in at 2894
- (3) Perforate at 1200-1250 ft & squeeze 4000
- (4) 10 sh at surface

JMB

McCulloch Oil Corporation of California
McCulloch-Govt. Wolf #1
S-23, T 40 S, R 13 W,
Washington Co., Utah

Core #1: 3,082'/3,090' Recovered 3 feet.

- 8' Dolomite, occasionally limey, light to dark gray, massive, very hard, scattered pyrite grains, microcrystalline grading to coarsely crystalline at base of core, impermeable, apparent bedding planes are filled with white crystalline calcite which exhibits dips ranging from 30° to 45°, highly fractured, common randomly oriented slickensides showing dark brown gouge material on surface. NOSCF.

Core #2: 7,058'/7,089' Recovered 31 feet.

- 8' Shale, dark gray with dark greenish cast, limey, thin bedded, fissile, brittle, breaks in thin chips. Thin beds and lenticles sandstone, very fine grained, hard, indurated quartzitic, gray green with pinkish cast, occasional graded beds. One bronze colored mollusk fragment, pyritic, lime cemented sandstone.
- 23' Limestone, dolomitic, gray to dark gray, brownish cast on fresh break, hard, dense, massive, stylolitic with dark gray to black wavy banded stylolites indicating low to flat dips. Occasional crinoid stems? with center of stem filled with finely crystalline calcite. Lower three feet has irregular pods and lenticles of very fine lime cemented quartz sandstone as in shale above. One vertical minor fracture indicated near middle of core. No porosity. No oil show.

Core #3: 7,256'/7,315' Recovered 59 feet.

- 41-1/2' Limestone, dark gray with brownish cast stylolitic microcrystalline, hard, dense, massive, common pods and lenticles recrystallized fossils. Strong H₂S odor on fresh break throughout interval. Finely disseminated pyrite. Low dip indicated. Common to abundant trilobite and brachiopod fragments.
- 13-1/2' Interbedded limestone as above and shale. Shale is dark green, waxy, common disseminated pyrite, micaceous and sericitic. Pods and lenticles limestone, brittle, fissile, very splintery, common trilobite and brachiopod fragments. Limestone as above, no H₂S odor. Local glauconite floods, low to flat dips on wavy and irregular contacts.
- 2-1/2' Shale as above with parting on bedding planes at less than 3° dip, fossils common, gradational into:
- 2-1/2' Interbedded shale as above and sandstone, quartzitic, dark gray with slight greenish cast, very fine grained, rare medium-coarse quartz grains, hard, brittle, flat dips, no odor, show or cut. No porosity and permeability.

LOG OF OPERATIONS

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
(ALL DEPTHS FROM KELLY BUSHING)		
December		(Days end at 12 midnight)
28	0'	Rigging up rotary tools.
29	0'	Rigging up rotary tools.
30	291'	Spud 9:30 a.m. Drilling 9-7/8" hole with water.
31	390'	Drilled 9-7/8" hole to 390'. Reaming 9-7/8" hole to 13-3/4".
January		
1	390'	Reamed hole to 390'. Strapped out of hole. Ran 11 joints 10-3/4", new, J-55, 32.75# casing. Cemented to surface with 165 sacks Type 5 Portland cement mixed with 2% calcium chloride. Waiting on cement.
2	403'	Waiting on cement, laid blooey line, blew hole dry. Drilled out shoe, drilling 9-7/8" hole with air. Mud loggers on hole.
3	666'	Drilling with Mission hammerdrill in drilling string. Making water at 410'.
4	920'	Drilling, encountering fresh water 125 gal/hr est.
5	1,026'	Drilling, encountering fresh water 125 gal/hr est.
6	1,267'	Drilling. Increase in water flow at 1,020' and 1,200'; approximately 1,500 gal/hr.
7	1,395'	Drilling.
8	1,470'	Drilling. Water flow approximately 200 bbls/hr.
9	1,629'	Drilling. Water increase at 1,600' at estimated rate of 400 to 500 barrels per hour. Removed Mission hammerdrill from drilling string.

Govt.-Wolf #1 Well Summary

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
January		
10	1,727'	Drilling. Water entry heavy but at stabilized rate of 400 to 500 bbls/hr, still fresh.
11	1,803'	Stuck pipe at 1,750'. Added 19 sacks of gel and worked pipe for 6-1/4 hours until free. Drilling ahead.
12	1,924'	Drilling.
13	1,994'	Drilled 9-7/8" hole to 1,989'. Now drilling 8-3/4" hole.
14	2,181'	Drilling.
15	2,317'	Drilling.
16	2,510'	Drilling.
17	2,803'	Drilling.
18	3,082'	Drilled 3,082'. Blew hole clean for 45 min., strapped out of hole. Picked up core barrel with 6-1/8" diamond core bit.
19	3,090'	Cut Core #1 3,082'/3,090'. Barrel jammed at 3,090'. Recovered 8' of core. Ran Induction-Electrical Survey, Gamma Ray-Neutron and Continuous Dipmeter.
20	3,090'	Reaming 8-3/4" hole to 9-7/8" for intermediate string.
21	3,090'	Reaming hole.
22	3,090'	Reamed hole to 2,985' (9-7/8"). Ran 92 joints, new, J-55, 26.40#, 7-5/8", 2,996.52' on hook with shoe at 2,994' (KB). Cemented with 75 sacks Type 5 Portland cement. Waiting on cement.
23	3,125'	Waited on cement for 26 hours. Picked up 3-1/2" drill pipe, blew hole dry, drilling 6-3/4" hole.
24	3,249'	Drilling.
25	3,364'	Drilling and blowing hole.

Govt.-Wolf #1 Well Summary

Date	Depth	Remarks
January		
26	3,442'	Drilling and blowing hole.
27	3,599'	Drilling.
28	3,818'	Drilling.
29	4,043'	Drilling.
30	4,310'	Drilling.
31	4,543'	Drilling.
February		
1	4,833'	Drilling.
2	5,001'	Drilling.
3	5,014'	Drilled to 5,014'. Salt water entry at 5,002'±. Mixing mud and lost circulation material for logging. Circulated for logs. Strapped drill pipe out of hole. Ran Induction-Electrical Survey, Gamma Ray-Neutron, Sonic-Caliper and Continuous Dipmeter. Mud weight 66 lb/cu ft, viscosity 53 seconds.
4	5,036'	Waited on orders. Drilling ahead. Minor lost circulation at 5,020'. Added lost circulation material.
5	5,127'	Drilling. Mud weight 65 lb/cu ft, viscosity 63 seconds, 12% LCM.
6	5,272'	Drilling. Mud weight 64 lb/cu ft, viscosity 77 seconds, 12% LCM.
7	5,357'	Drilling. Mud weight 66 lb/cu ft, viscosity 65 seconds.
8	5,436'	Drilling. Mud weight 65 lb/cu ft, viscosity 50 seconds.
9	5,545'	Drilling. Mud weight 66 lb/cu ft, viscosity 48 seconds. Losing small amount of mud.
10	5,651'	Drilling. Mud weight 67 lb/cu ft, viscosity 49 seconds.
11	5,803'	Drilling. Mud weight 67 lb/cu ft, viscosity 47 seconds.
12	5,884'	Drilling. Mud weight 68 lb/cu ft, viscosity 48 seconds.
13	6,002'	Drilling. Mud weight 68 lb/cu ft, Viscosity 49 seconds.

Govt.-Wolf #1 Well Summary

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
February		
14	6,086'	Drilling. Mud weight 66 lb/cu ft, viscosity 63 seconds.
15	6,239'	Drilling. Mud weight 68 lb/cu ft, viscosity 60 seconds.
16	6,308'	Drilling. Lost 300 barrels mud to formation. Added LCM. Mud weight 67 lb/cu ft, viscosity 68 seconds.
17	6,393'	Drilling. Mud weight 66 lb/cu ft, viscosity 63 seconds.
18	6,487'	Drilling. Mud weight 68 lb/cu ft, viscosity 51 seconds.
19	6,566'	Drilling. Mud weight 68 lb/cu ft, viscosity 50 seconds.
20	6,687'	Drilling. Mud weight 68 lb/cu ft, viscosity 47 seconds. 13% LCM in mud.
21	6,811'	Drilling. Mud weight 69 lb/cu ft, viscosity 55 seconds.
22	6,938'	Drilling. Mud weight 69 lb/cu ft, viscosity 51 seconds.
23	7,018'	Drilling. Mud weight 70 lb/cu ft, viscosity 46 seconds.
24	7,057'	Drilled to 7,057' by driller (7,061' by Schlumberger), strapped drill pipe out of hole. Ran Gamma Ray-Sonic and Continuous Dipmeter. Mud weight 70 lb/cu ft, viscosity 48 seconds.
25	7,057'	Ran in with 6-1/8" diamond core head but could not break circulation. Pulled core barrel. Found LCM plugging between inner and outer barrels. Cleaned core barrel and went in hole to cut Core #2.
26	7,077'	Cut Core #2 (7,057'/7,077'). Waited on orders. Reamed core hole to 6-3/4". Mud weight 70 lb/cu ft, viscosity 62 seconds.
27	7,216'	Drilling. Mud weight 69 lb/cu ft, viscosity 45 seconds.
28	7,299'	Drilling and coring with 6-1/8" core head. Mud weight 70 lb/cu ft, viscosity 47 seconds.

Govt.-Wolf #1 Well Summary

<u>Date</u>	<u>Depth</u>	<u>Remarks</u>
February		
29	7,315'	<p>Cut Core #3 (7,256'/7,315'). Installed 40 sack cement plug in interval 5,050'/4,900'. Installed 40 sack cement plug across shoe of 7-5/8" casing in interval 3,044'/2,920'. Shot four 1/2" holes in 7-5/8" casing at 1,200'. Squeezed 40 sacks through perforations. Fluid level dropped to 625' after shooting perforations. After squeezing cement through perforations fluid level was at 595'. Installed ten sack cement plug at surface. Welded steel plate on surface casing and erected regulation dry hole marker.</p> <p>Well plugged and abandoned February 29, 1964.</p>

V
PAP

HALLIBURTON DIVISION LABORATORY
OKLAHOMA CITY, OKLAHOMA
HALLIBURTON COMPANY

FIELD LABORATORIES MAINTAINED AT VARIOUS POINTS IN THE OIL FIELDS

LABORATORY WATER ANALYSIS

Date February 7, 1964

Kingwood Oil Company
Mr. John Gatchell
1st National Bldg. Okla. City, Okla.

Report No. 8773

Submitted By C. E. Kopp Date Received February 5, 1964

Well No. Government-Wolf #1 Depth 1440 ft. Formation _____

Location Washington County Section 23 Township 40 S Range 13 W
Utah

Resistivity _____

450 ohm / km

Specific Gravity 1.000

pH 7.74

Total Dissolved Solids 579 Parts per Million*

Calcium (Ca) 110 Parts per Million

Magnesium (Mg) 45 Parts per Million

Chlorides (Cl) 102 Parts per Million

Sulfates (SO₄) 232 Parts per Million

Carbonates (CO₃) 0 Parts per Million

Bicarbonates (HCO₃) 90 Parts per Million

Total Iron (Fe) trace Parts per Million

Drilled by air - rotary.

*Flowed 450 sec/hr.
(when drilled with air)*

*Water level - 680' below
surface*

*Scattered zones between
1200 + 3000'*

Remarks:

*Parts per million, by weight, uncorrected for Specific Gravity.

Respectfully submitted,

HALLIBURTON COMPANY

cc W. L. Hughes
W. W. Ball
C. E. Kopp

By [Signature]

Division Chemist

NOTICE:

This report is limited to the described sample tested. Any use of this report beyond that Halliburton shall not be liable for any loss or damage, whether due to act or omission, resulting from such report or its use.

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION
310 NEWHOUSE BUILDING
SALT LAKE CITY 11, UTAH

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: Gov't. Wolf #1

Operator McCulloch Oil Corp. of Calif. Address 6151 W. Century Blvd.
Los Angeles, Calif. Phone 776-1151
P. O. Box 1532

Contractor Willard Pease Drilling Co. Address Grand Junction, Phone
Colo.

Location: NW 1/4 NE 1/4 Sec. 23 T. 40 N R. 13 E Washington County, Utah.
S W

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
<u>From</u>	<u>To</u>	<u>Flow Rate or Head</u>	<u>Fresh or Salty</u>
1. <u>400'±</u>	<u>1,600'±</u>	<u>See Remarks #1</u>	<u>Very Fresh</u>
2. <u>4,960'</u>	<u>5,002'</u>	<u>See Remarks #2</u>	<u>Salty</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>

(Continued on reverse side if necessary)

Formation Tops:

Only known formation top in this well is the Cambrian at 5,000'±.
Well at total depth (7,315') bottomed in Bright Angel formation.

Remarks:

- While well was drilling water entry increased gradually from 400'± to a depth of 1,600' where rate stabilized and remained constant until entire zone was cased through with 7-5/8" casing set at 2,994'. The maximum rate of discharge was estimated to be approximately from 400 to 500 bbls/hour. according to E log measurements fresh water stood at 765' in well bore. It is probable that this entry was from fractures occurring in the carbonate section being drilled.

(over)

NOTE: (a) Upon diminishing supply of forms, please inform the Commission
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure. (See back of form)

APR 16 1964

June 11, 1964

McCulloch Oil Corporation of California
6151 W. Century Blvd.
Los Angeles, California

Re: Well No. Government Wolf #1
Sec. 23, T. 40 S., R. 13 W.,
Washington County, Utah

Gentlemen:

This letter is to advise you that the well log and electric and/or radioactivity logs for the above mentioned well are due and have not been filed with this Commission as required by our rules and regulations,

Please complete the enclosed Forms OGCC-3, "Well Completion or Recompletion Report and Log", in duplicate and forward them to this office as soon as possible. If electric and/or radioactivity logs were not run, please make a statement to that effect in order to keep our records accurate and complete.

Thank you for your cooperation in this request.

Very truly yours,

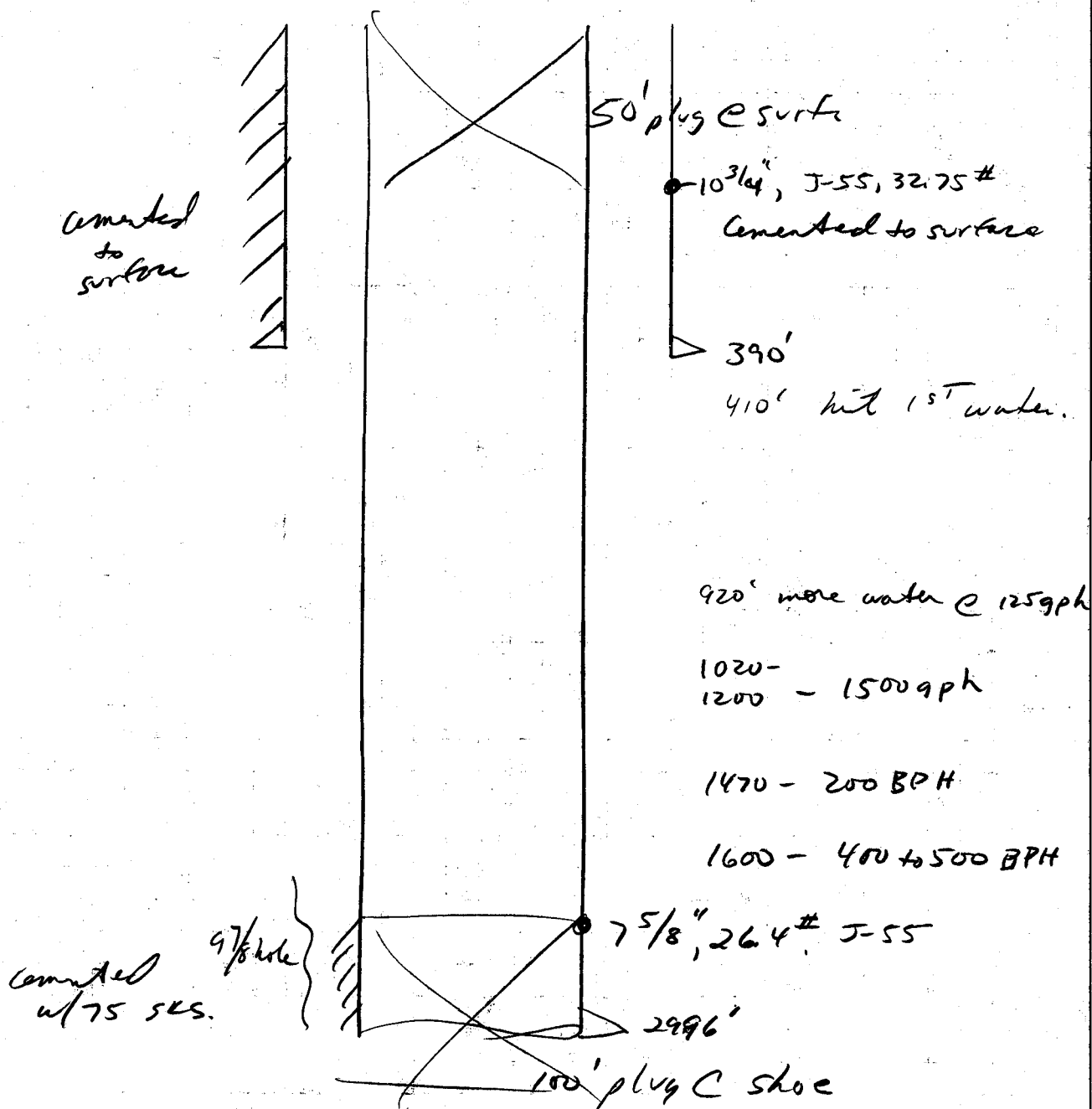
OIL & GAS CONSERVATION COMMISSION

CLARELLA N. PECK
RECORDS CLERK

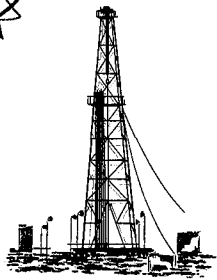
CNP:ns

Enclosure - Forms

File 1-10-02



Spoke w/ Doug C LaVackin and he wants to re-enter this well 5' test it for water prod. I covered the risks of this idea & need for APD to re-enter.



ROBERT F. McCULLOCH, PRESIDENT

McCULLOCH OIL CORPORATION OF CALIFORNIA



BUSINESS AND EXECUTIVE OFFICES: TWELFTH FLOOR, McCULLOCH BUILDING
6151 WEST CENTURY BOULEVARD • LOS ANGELES, CALIFORNIA 90045 • TELEPHONES: 776-1151 • 645-4280

June 15, 1964

Original 9/2/64

State of Utah
Oil & Gas Conservation Commission
310 Newhouse Bldg.
10 Exchange Place
Salt Lake City, Utah

Gentlemen:

Well No. Gov't. Wolf #1
Sec. 23, T 40 S, R 13 W
Washington County, Utah

Enclosed for your files in duplicate are the following items
pertaining to the subject well:

Well Completion Report and Log
Core Descriptions
Well Summary
IES Log
Gamma Ray-Neutron Log
Sonic-Gamma Ray Log
Mud Log

Very truly yours,

J. M. Maxwell
Geologist

JMM:pjh

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-023474-A	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Not APP	
2. NAME OF OPERATOR McCulloch Oil Corp. of California		7. UNIT AGREEMENT NAME Not APP	
3. ADDRESS OF OPERATOR 6151 W. Century Blvd. Los Angeles, Calif.		8. FARM OR LEASE NAME Utah 023474-A	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 90' S, 3,515' E of NW corner Section 23 T 40 S R 13 W 6 PM Washington Co. Utah At top prod. interval reported below Not applicable At total depth		9. WELL NO. #1	
14. PERMIT NO.		DATE ISSUED	
15. DATE SPUNDED 12-30-63		16. DATE T.D. REACHED 2-29-64	
17. DATE COMPL. (Ready to prod.) Abandoned 2-29-64		18. ELEVATIONS (OF, REB, BT, GB, ETC.)* GR-3,800' RKB 3,810'	
19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD 7,315	
21. PLUG, BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY Not APP	
23. INTERVALS DRILLED BY Rotary tools (7,315)		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* None	
25. WAS DIRECTIONAL SURVEY MADE yes results attached		26. TYPE ELECTRIC AND OTHER LOGS RUN IES, GRN, Sonic Caliper, Continuous Dipmeter	
27. WAS WELL CORED yes		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number) 4 jet holes 1/2" for cement squeeze shot at 1,200'		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
33. PRODUCTION		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Not APP	
35. LIST OF ATTACHMENTS 2 copies each Core descriptions, IES Log, Gamma-Ray Neutron Sonic Gamma-Ray, Mud Log		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records. SIGNED [Signature] TITLE Exploration and Operations DATE 3-30-64	

(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submission of a complete and correct well completion report and log on all types of land and leases to either a Federal agency or a State agency or both, pursuant to applicable Federal and/or State laws and regulations. Any well completion report submitted to a Federal agency or a State agency must be submitted to the appropriate Federal or State agency, either as shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 36.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s), and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

SUMMARY OF POROUS ZONES:		DEPT. INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SECT-IN PRESSURES, AND RECOVERIES		DESCRIPTION, CONTENTS, ETC.		GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	TEST	RECOVERY	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Limestone	400'	1,600'	Interval 400'/1,600' apparently contains fracture porosity as well made fresh water in this zone. Water level stood at 765' in well. (not tested)		Only known geologic formation top is Cambrian at 5,000' t. Well at total depth (5,315') bottomed in Bright Angel formation.		
Limestone/Dolomite	2,310'	2,350'	Minor inter-crystalline porosity observed in well cuttings (not tested)				
Limestone/Dolomite	5,004'	5,006'	Sonic log indicates porosity (not tested)				
Cored Intervals:		Core #1 3,082'/3,090' *					
		Core #2 7,658'/7,660' *					
		Core #3 7,255'/7,255' *					
		* Core descriptions are attached					

JUN 18 1964